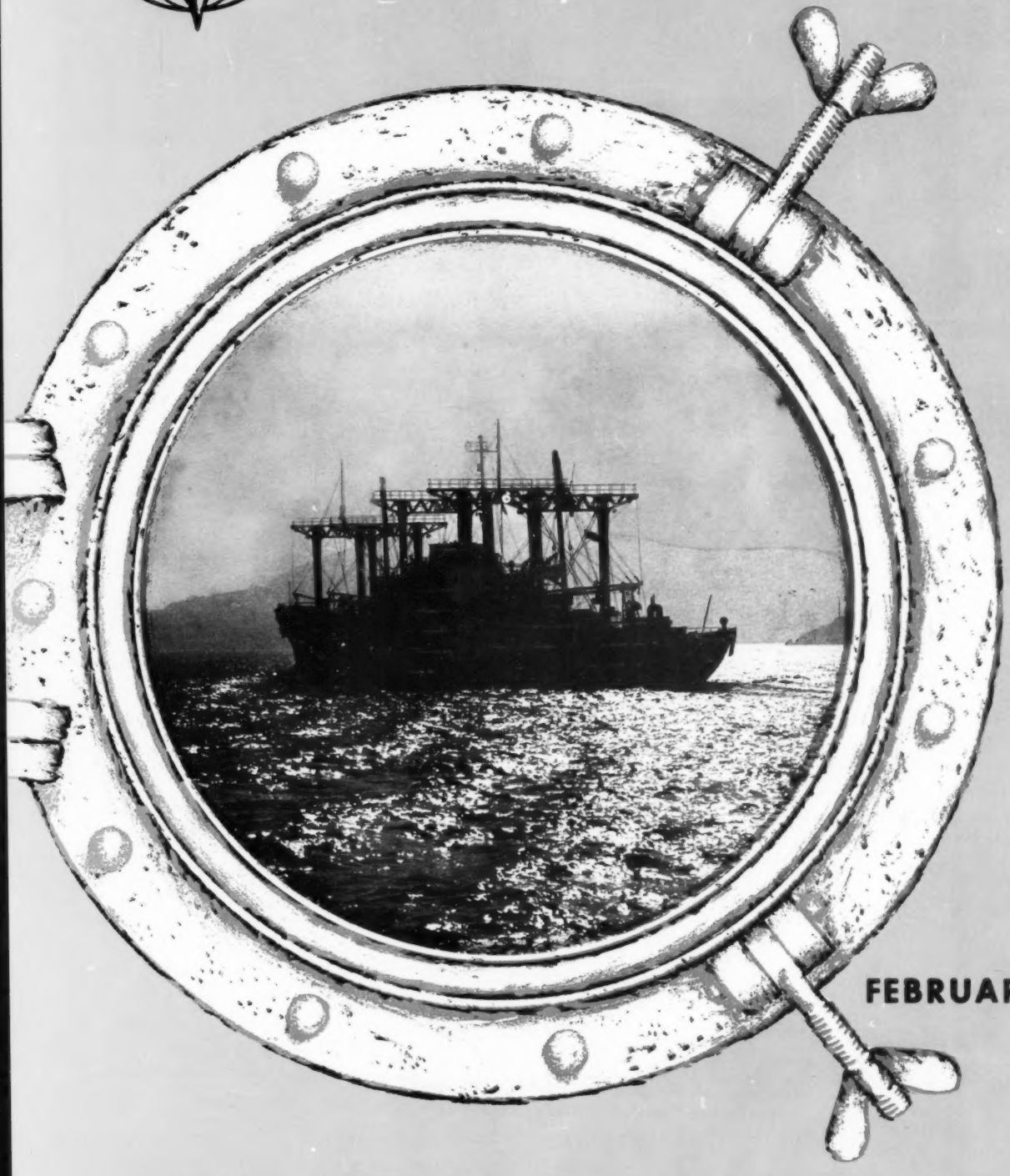
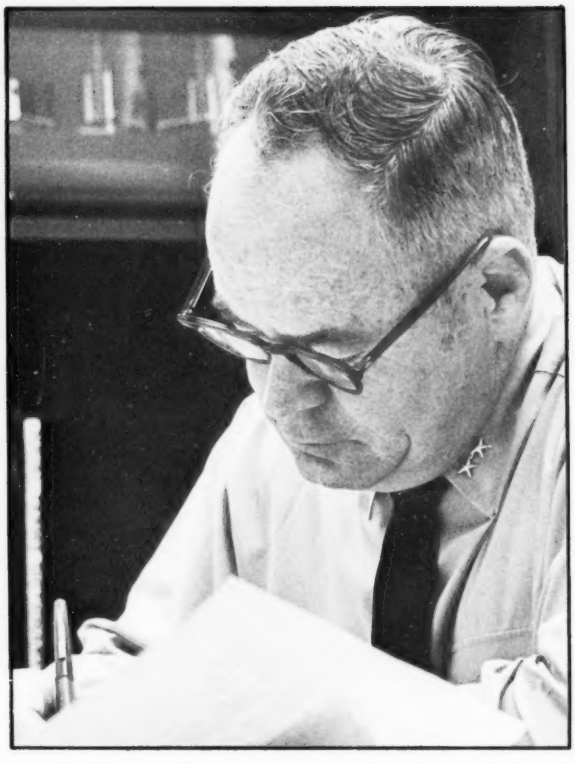
SEALIFT



FEBRUARY 1973

NOTES ON FAR EAST



I have just recently returned from an inspection trip of the Military Sealift Command in the Far East where I was favorably impressed by what our people are doing, particularly by their flexibility in responding to a rapidly changing situation. The governing constraint on the withdrawal program is, of course, the time schedule which must be met—and which we are meeting. However, even in the near term the primary consideration will very likely become economy of operation. MSC, Far East has already put much emphasis on economy in their planning. This certainly will be necessary for the entire command as requirements decrease.

I also had the pleasure of lunch on board USNS Upshur in Pusan, Korea. She is a fine ship and it is unfortunate that passenger requirements in peacetime cannot support operation of troop transports. Barret and Upshur steam homeward with well deserved kudos from many commanders.

I also had lunch aboard Taluga and was most pleased by her performance. She is doing every bit as well or better than any United States Navy oiler in the fleet. All of us in MSC can take pride in her performance and reputation. It now appears that we will man at least two fleet tugs and three cable layers the next fiscal year. It is vital that things go as well with these ships as they have with Taluga.

One can't help but note the tremendous economic growth throughout the area—particularly the growth in facilities for seaborne trade. The new container piers at Yokohama, the container yards and LASH berths at Keelong, the fantastic development at Inchon designed to cope with tremendous tides, the ambitious port development plans at Guam are some examples. The United States Merchant Marine must participate in our Nation's increased trade, and we in MSC need to support that goal.

On the occasion of the Commander in Chief, Pacific debrief at Pear Harbor, MSC again was commended for support of our country's efforts in Southeast Asia. I'm sure that we will respond to the challenges of the future just as we have to those of the past.

John D. Chase

Commander, Military Sealift Command

COVERS: The crew of the yacht Illahee meet the USNS Bland. Art by Lynn O'Connor and Henry Balloon.

SEALIFT

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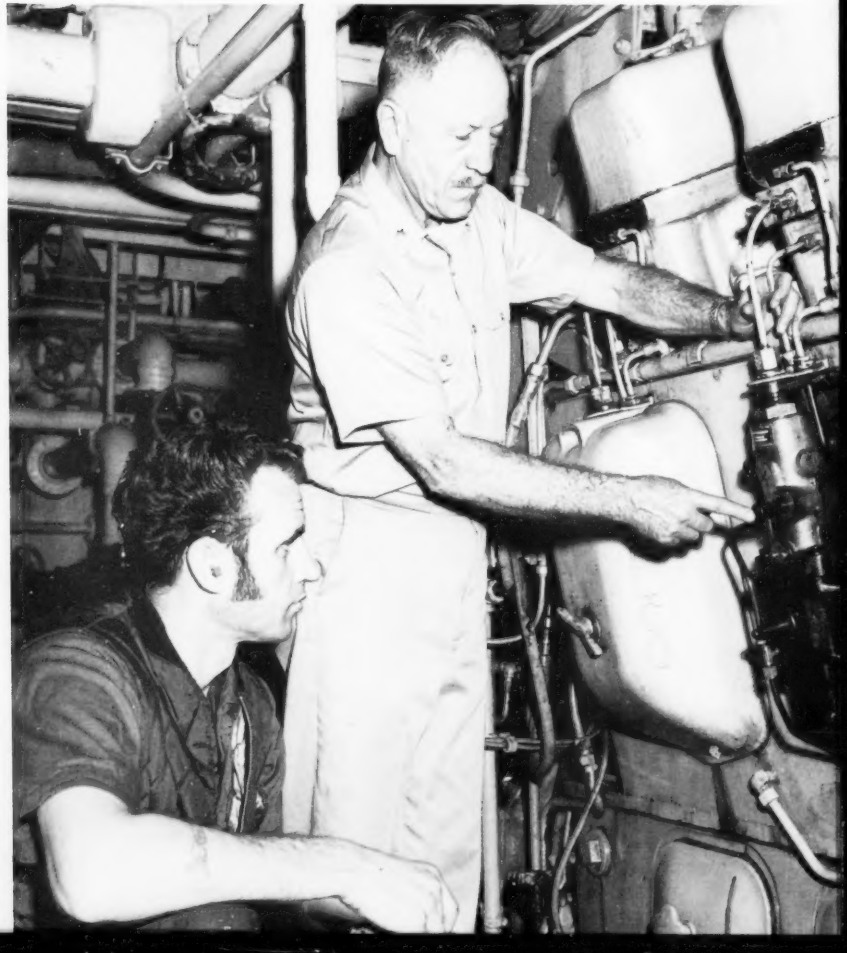
Overcoming such obstacles as fire, typhoons and language barriers, MSC engineers

Keep 'em purring

by
George H. Harlan
Deputy Engineering Officer
MSC, Pacific

The average individual contemplating the role of a seagoing engineer would think of him as a throttle-pusher who responds to the order telegraph from the bridge for the desired engine speed. This may be a credible image in some cases but the MSC engineer faces a much greater responsibility. At times he enjoys the luxury of shore-side assistance when mechanical or electrical components break down, but assistance is not always available. An MSC engineer must stand ready to make repairs at sea in a wide variety of instances, often under adverse conditions.

Take Frank Wolden, for instance. He was assigned as chief engineer in USNS Eltanin operating in the



CHECKING: First Assistant Engineer Roy F. Roach shows Engineer Utilityman George R. Waters what to look for when inspecting the main fuel pumps. Both men are assigned to the USNS Myer.

Tasman Sea on a mission for the National Science Foundation. On the 7th of November, 1972, a bonnet came adrift from a sea water service valve, partially flooding the main generator and motor rooms. Wolden, equal to the emergency, got the leakage stopped and then commenced the tedious task of de-watering both compartments with submersible bilge pumps. Then the generators and motors had to be washed free of salt water. Speed was vital, for if salt deposits remained in the equipment for any length of time, damage would be beyond the capability of the ship's force to correct.

After drying out, it was found that the No. 1 main generator was burned out and No. 2 main generator was grounded out. To many chief engineers this situation would have been too calamitous to attempt repairs at sea. Despite a storm which engulfed the vessel, Frank Wolden went to work. With his crew laboring 24 hours a day, all work was completed on No. 2 propulsion generator by noon the next day. After two days of great effort, 100 per cent power was available on No. 1 main propulsion generator and 90 per cent power on No. 2 main propulsion generator. The ship resumed its mission November 12.

This effort not only avoided the expense of having to tow the ship back into port for repairs, when repair costs could have been extremely high, but illustrated the training and professional pride of MSC engineering personnel. This was the second outstanding accomplishment by Frank Wolden during the year. Prior to being assigned to USNS Eltanin, he was chief engineer of USNS Lee while the ship was in ready reserve status. Without a crew, Frank completey overhauled all ship diesels by himself, and got credit for completing an American Bureau of Shipping special periodic survey.

Captain Martin Lutgendort, of the USNS Bartlett, wrote the following concerning Chief Engineer Anchor Nielsen and his engine department crew. "On the morning of October 7, 1972, the ship left Yokosuka for what was hoped to be a routine crossing to Hawaii. As soon as the Island of Honshu was left behind, strong northeasterly winds were encountered in the wake of typhoon Kathy. Sunday, October 8, at 11 p.m. while approximately 300 miles due east of Japan, the No. 1 main engine broke down and the vessel's speed was cut to only 4 knots."

"At the same time, typhoon Marie was located east of the Mariannas and had started to curve northward. The master strongly considered returning to Yokosuka, but the chief engineer located the cause of the trouble, worn splines on the pinion gear assembly and shaft of the governor drive. Spare parts were not available, so the chief engineer proceeded to fabricate parts, giving the master an estimated completion time of 6 a.m., October 10."

"Repairs were completed by 3 a.m. and Bartlett proceeded for Honolulu, arriving only 24 hours late. Besides the chief, Leon Hubner, first; Harry Highhouse, second and Harry Seevers, third assistant engineers, all worked around the clock to complete the work before the typhoon took over."

October 22, 1972 is a day that will be remembered by those on board USNS Silas Bent, doing ocean surveys off Pusan Harbor, Korea. At aproximately 12:30 p.m. local time, smoke was seen pouring out of the stack. Captain Richard B. Hosey sounded the general alarm. The gas turbine had caught fire, dropping the entire ship's power load onto No. 1 ship's service generator.

ANOUNCE OF PREVENTION: Frank Wolden, chief engineer aboard USNS Eltonin, looks over one of his engines.

MAINTENANCE: Chief Engineer Don McKee and First Assistant Engineer Ed Shaeffer adjust the combustion control system aboard Taluga.

REPLACEMENT: Since Chief Engineer John King reported aboard the USNS Myer in 1970, he has virtually overhauled the entire ship.

Unable to absorb the load forced upon it, the unit tripped off the line, leaving the ship without electric power to run the salt water fire pumps. The only fire-fighting equipment left for use was the carbon dioxide extinguishers, and they were not adequate to put out the blaze.

First Assistant Engineer Roy Roach went into the smoke-filled engine room, which was connected to the gas turbine room by an escape trunk, and brought carbon dioxide equipment up the vertical ladder and fought the fire through the escape hatch. Chief Engineer Warren Smith, seeing that water pressure had to be restored if the fire was to be contained, returned to the engine room with some of his key personnel and succeeded in starting the No. 1 generator, stripping the main switchboard of unnecessary loads to assure that sufficient power was available for the fire pumps.

Captain Hosey was particularly enthusiastic in his praise of these engine personnel who risked their lives to restore fire combating capability to the ship. By 1:30 the same day, the fire was extinguished and the Bent got underway at 1:45 for Pusan.

"Had it not been for the valuable MSC training," said Captain Hosey, "there would not have been such quick control of the fire, and probability is strong that the ship would have been lost. Really there were two casualties, the fire itself, and the loss of plant. One of

these alone was bad enough. Collectively, they could have been disastrous."

Response to casualties and the heroics normally associated with such response, do not constitute the extent of engineers' effort in the field of repair. When Chief Engineer John King reported to USNS Myer in 1970, he found many noted deficiencies in the field of habitability and storeroom requirements. With the blessing of the administrative commander, John King went to work. He installed new metal furniture in most staterooms, replacing old combustible material which had been in the ship since it was built. He inventoried all engine stores and spare parts which were liberally distributed throughout the ship in unsuitable storerooms, then constructed new storerooms, complete with bins and shelves, in the void areas surrounding the cable tanks.

The following year he built a new electric shop, and constructed a facility to permit the mate to better stow his cable gear. In 1972, he added a new machine shop and installed air conditioning units in many midship-house staterooms. Much needed improvements were made at a fraction of the cost that would have been required for the same work by a shore-side shop.

When MSC, Pacific was asked how keeping MSC's first fleet oiler, USNS Taluga, on the line was to be accomplished, all eyes focused on Chief Engineer Don McKee, a one-man repair gang. When a ship's on an underway replenishment mission, there is no time to repair casualties. McKee and First Assistant Engineer Ed Shaeffer continually overhaul pumps, boilers and other major components while on mission. They even overhauled one of the fueling-at-sea probes, thus keeping full refueling capabilities and adequate back-up spares available. When repairs of components are too great for the ship's force, Don McKee pulls out the whole unit. After the ship completes its mission, he installs the repaired component returned from shore, thus giving Taluga maximum time in fleet support operations.

Chief Engineer McKee is an effective instructor. In early 1972, he was chief engineer of USNS Kellar, an oceanographic ship which was turned over to the Republic of Portugal. Don McKee stayed on the ship following the transfer to instruct the Portuguese in operation of the plant. This proved to be an unusual task since the Portuguese spoke little English, and Don McKee spoke no Portuguese. His instruction was accomplished in sign language invented by both parties on the spot. Success of his training was indicated by the nodding of heads and the exclamation "Testa, testa" from the Portuguese crew, acknowledging that they were ready to check out the equipment on which they had been instructed.

To the MSC engineer, working in confined spaces, toiling in a hot boiler, keeping busy while the ship rolls and pitches unmercifully, it's all in a day's work. But it's this kind of work which keeps MSC ships on the line and insures that they meet mission requirements.

⚓

ADJUSTMENT: USNS Bartlett Chief Engineer Anchor Nielsen and Second Assistant Engineer Harry Highhouse work on the ship's No. 2 main engine governor.

Introduction of Sea-Land's SL-7s capable of 33 knot speeds and carrying 1,096 containers provides new impetus to the

Sealift revolution

by
Larry C. Manning

Speed of the ongoing U.S. sealift revolution is evidenced by the fact that 73 per cent of liner-type cargo on North Atlantic routes was carried in containers in 1971—compared to only 38 per cent in 1968.

Introduction of eight new, high-speed, high-capacity SL-7 super container ships by Sea-Land Service, Inc. will most certainly accelerate the trend. Two SL-7s—the Sea-Land Galloway and the Sea-Land McLean already are in Atlantic service with the remaining six to be in operation by the end of 1974.

They, however, will be put in service in the Pacific where the percentage of liner cargo now moving in containers on Pacific-Far East runs was 32 per cent, up from 6 per cent in 1968.

Introduction of the 33-knot SL-7s could well mean a larger share of United States import-export container trade for American flag ships which now move 40 per cent of the nation's trade.

The SL-7s are big, fast, expensive and productive. Each is 946 feet long, more than three times the length of a football field. Capable of sailing at 33 knot speeds, each could cross the Atlantic in 4½ days. The largest container ships now operating, they threaten the trans-Atlantic crossing mark of the S.S. United States. Set 20 years ago, that record is three days and 10 hours—which meant an average speed of 33.5 knots. In the first SL-7 crossing, the ship averaged 32.8 knots per hour. The speed record for freighters was about 27 knots.

"The SL-7s are big, fast, expensive—and productive."

SS SEA-LAND GALLOWAY

The new container ships displace 50,315 tons and are powered by steam turbines driving twin propellers. The power plants generate 120,000 shaft horsepower.

Each of the eight ships can carry 1,096 containers, 896 thirty-foot boxes and 200 forty-foot containers. Forward deck depth is 64 feet and aft decks are 68 feet 6 inches. Below deck storage will accomodate 554 containers with the remainder stored on deck.

Currently, the two SL-7s in operation are providing weekly service between Elizabeth, N.J., and Rotterdam and Bremerhaven. Feeder ships are used to deliver cargo to the two super container ships from U.S. ports ranging from Boston to the Gulf of Mexico—thus enabling Sea-Land to maintain the weekly service with but two ships. Ordinarily, container ships make two or three stops in U.S. ports to unload or load cargo.

According to Paul Richardson, Sea-Land president, feeder vessels move about 50 per cent of the SL-7 carried

cargo into the container port at Elizabeth. The other half arrives by truck.

In a press conference earlier this year, Richardson indicated that six SL-7s will be put into Pacific service. In that same press conference, the Sea-Land president said he expected the two SL-7s now in Atlantic operation would probably be filled to about 18 per cent capacity with traditional North Atlantic cargo. The remainder of the ships would be filled, he said, with military cargo and cargo brought into the Elizabeth port complex by feeder ships from other U.S. ports outside the North Atlantic area.

"The company is determined to prove that American ships can provide competitive ocean service."

Among the ports now being served by Sea-Land feeder ships are Jacksonville, Fla.; Boston; Baltimore; Charleston, S.C.; and Portsmouth, Va. Feeder ships also link the SL-7s arriving at Bremerhaven and Rotterdam with Eastern European ports and Scandinavian countries.

Mr. Richardson has estimated that the ships must sail with 50 to 70 per cent of their containers full just to break even. In a sense, the newest addition to the U.S. container fleet is like the Boeing 747 aircraft. With full loads they are highly productive carriers which produce substantial revenues. Sitting idle, or sailing with limited cargo, both the 747 and the SL-7 lose money for their owners.

To insure effective utilization, Sea-Land is carrying on an effective marketing effort which is tied to the reliable, weekly service the vessels provide shippers.

Sea-Land also has upgraded its terminal facilities at Elizabeth. There, a 232 acre Sea-Land terminal has been built on reclaimed marshland. Developed by the Port of New York and New Jersey, more than $143 million has been poured into the port by the bi-state agency. Recent Sea-Land expansion of its facilities has tripled the capacity of the company terminal there—and insures an efficient flow of cargo necessary for rapid unloading and loading of the SL-7s.

What it all adds up to, in the words of a Sea-Land spokesman, is that the company is determined to prove that American owned and American manned ships can provide competitive ocean service without government subsidy—and prosper while doing just that.

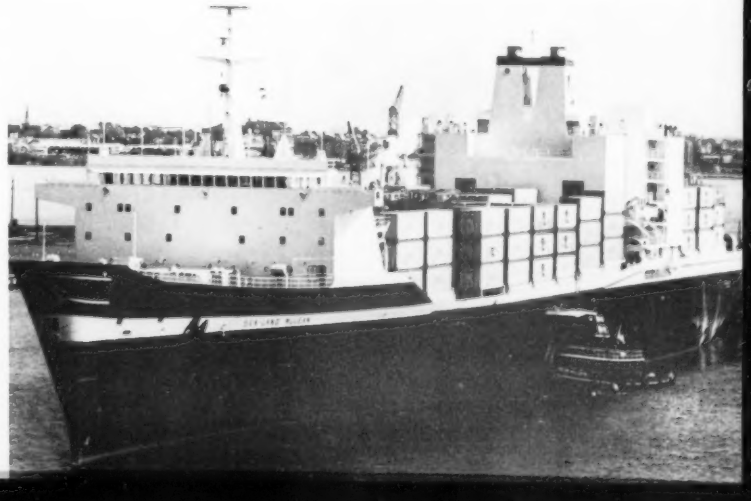
With introduction of SL-7s into the North Atlantic trade, Sea-Land has shifted two container ships formerly sailing there—the SL-180 and SL-181—to service between U.S. Gulf ports and Europe. There they will be competing with barge carriers—Seabees—and other ships operated by Lykes Brothers on the same routes.

But competition in the container field is worldwide. U.S. containerships now carry about 40 per cent of world trade where they once carried 60 per cent. Since the mid-1950s, when Sea-Land pioneered use of the container, the maritime equivalent of the jet engine in the air carrier industry, the world's container fleet has grown from a very small number of ships to a fleet of 312, to more than 4.3 million gross tons. Another 2 million tons are on order, or under construction.

Already, the U.S. traveler encounters trailer trucks bearing the names of U.S. steamship companies on the highways he drives. Other sea-delivered containers move on rail lines across our country, headed for the factory door or the farmer's field. Containers are easily spotted at construction sites, at processing plants, and at the loading ramps of American grocery stores.

No one can judge with any great validity the future impact of the container on transportation. But it's certain, even for the most ardent defender of the status quo, that the intermodal transportation picture is changing, and changing rapidly. The container and container ships are going to have an even greater impact on the distribution system of this country, and on those of nations with whom we trade. ⚓

SS SEA-LAND McLEAN



Crew of the yacht Illahee found that, better than a lifesaver for a parched palate, is a bit of

Bland sherbet

Sailing a small yacht across the Pacific in mid-summer can be a sweltering, arduous and boring task, especially when the winds refuse to blow and a rusty diesel engine putters along, each cough seemingly its dying gasp. This was the situation Una and Torsten Kruse and their bearded crew-member, Ed, found themselves in while delivering a yacht to a new owner in Los Angeles.

The Illahee, crewed by the Kruses and Ed, was 13 days out from Honolulu last summer when they were becalmed in the doldrums of weather and boredom.

MSC's USNS Schuyler Otis Bland was four days out of Seattle, bound for Southeast Asia, when it sighted the Illahee on the horizon, seemingly in trouble, since it was making little speed. The Bland reduced speed, stopped a safe distance from the yacht, and waited until the Illahee moved within hailing range. Greetings reminiscent of the days of Moby Dick were exchanged and the Bland crew learned that the yacht was in no serious trouble.

Mindful of the courtesies of the sea, Captain Harold A. Slusher asked whether anything was needed by the yacht's crew. After a moment of excited discussion, the reply came resounding over the waves, "ICE CREAM!" Captain Slusher offered iced sherbert as a substitute and the switch was accepted with alacrity.

The Illahee crew was asked to manuever to the Bland's stern and the crew of the MSC ship prepared for a highline (or rather, lowline) operation. One Illahee crew-member, Ed, was making his first crossing and was ecstatic with anticipation, having spent days craving—and daydreaming about exotic fare such as ice cream.

Captain Slusher recently received a note from the crew of Illahee. "Thank you again for the 'hospitality,'" it read "it's nice to know the little yachtsman is looked out for a bit. It was fun for us to talk to you, and of course we ate ourselves sick with the sherbet."

Although hardly to be classified as a mercy mission, it does seem that this incident was in keeping with the traditional readiness, willingness, and ability of ships of the Navy to meet any situation that may arise on the high seas.

The note from the Kruses ended with, "We are sailing between California and Hawaii quite a bit, perhaps we will meet you again at sea!"

Perhaps they will.

⚓

Names Like Thor and Neptune give one the impression that

Mythological gods are coming to MSC

In announcing the retirement of 28 Navy fleet ships and four Naval Reserve Force vessels, Chief of Naval Operations Admiral Elmo R. Zumwalt Jr. created approximately 300 new jobs for MSC Civil Service mariners.

Five ships now manned by bluejacket crews are to be transferred to Military Sealift Command for operation with civilian crews. Ships involved are the ocean-going salvage tugs USS Lipan and USS Mosopelea and three cable layers. They are the USS Aeolus, Thor and Neptune.

All will be part of the MSC special projects fleet with the cable repair ships to be operated by MSC for the Naval Electronic Systems Command. Requirements for tug operations will be received by MSC from the Service Force commanders of the Atlantic and Pacific Fleets.

The Aeolus, Neptune and Mosopelea will be under MSC, Atlantic operational control and will be home-ported at Brooklyn. MSC, Pacific will operate the Thor and Lipan.

According to MSC personnel officials, recruitment actions by the two commands to fill ship berths should begin about mid-May with the ships to be transferred later in the year. Prior to resuming normal operation service, the vessels will be overhauled and equipment not needed for civilian operation will be removed. Missions of the ships will be unchanged by the transfer to MSC.

While in temporary drydock, all five vessels will have MSC markings painted on their stacks and command insignia also will be on the stacks—beneath the black, blue and gold MSC stripes.

Transfer of the ships to MSC for civilian manning is in accord with previous actions by Admiral Elmo Zumwalt designed to modernize the combatant fleet within present budgetary constraints. Average age of the 28 ships retired is 26 years. However, Navy expects to receive 13 newer ships now being converted or constructed.

Admiral Zumwalt also has urged his commanders to identify other fleet support type ships which could be operated by Civil Service crews rather than bluejackets. MSC now sails a former fleet oiler, the USNS Taluga, in support of Pacific Fleet ships. It is possible, as Admiral Zumwalt has indicated, that other fleet support type ships—such as ammunition vessels, stores ships or other oilers—may be transferred to MSC for future operations. These alternatives are under Navy study.

The USS Lipan was commissioned April 29, 1943 and has seen service all over the Pacific, distinguishing herself in World War II and Korea by earning six battle stars.

Launched May 6, 1945, the USS Mosopelea has operated mainly out of Norfolk, Va., during her career. During the Cuban crisis of October-November 1962, the ship operated on standby emergency status, towing Army personnel barges from Charleston to Port Everglades, Fla.

USS MOSOPELEA: Homeported in Norfolk, Va., for almost 20 years.

USS LIPAN: Off the coast of Hawaii.

The Aeolus, which bears the name of the mythological Greek god of the winds, was launched May 20, 1945. Originally a troop ship, the Aeolus entered service too late for action in World War II, but participated in "Magic Carpet" operations which returned American servicemen from Saipan to the United States. Aeolus was recommissioned May 14, 1955 at the Bethlehem Steel Co. Shipyard in Baltimore, Md. where she had been converted to a cable layer. Since that time she has served mainly in the Atlantic.

Built by the Navy in 1953, th
spent nearly 20 years in the installa
of underwater facilities used for r
evaluation and training.

3, the USS Neptune has
stallation and maintenance
for research, development,

Named after the Norse god of Thunder, the USS Thor was commissioned January 9, 1945. After only six months service she was decommissioned and anchored in the James River reserve fleet. In April 1955 the Thor was converted to a cable repair ship. Cable machinery on board can handle loads up to 50 tons. She also has served all over the world and has recently been home-ported at Portsmouth, New Hampshire.

All of the five newly acquired ships have distinguished records—and have a reputation which will challenge the civilian crews who will be manning them. ⚓

UPS and downs of replenishment

According to an old law of physics, that which goes up must come down. The question is, where? An archer may not know where his airborne arrow will land—or care—but Navy men involved in helolift of valuable military cargo from ship to ship know exactly where they want to go, and how to do the job efficiently.

To expand their knowledge and skills they continually engage in vertical replenishment exercises, using new techniques, and new equipment as they become available. In a recent exercise, Navy men of the USS San Diego and the civilian crew of the commercially operated barge carrier LASH Italia carried out a vertical replenishment while both ships were underway at 20-knot speeds.

LASH Italia is a barge carrier operated by Prudential-Grace Lines sailing on a regular run from the United States which serves Spain. USS San Diego is an Atlantic Fleet Service Force combat stores ship, supporting the Sixth Fleet. The LASH Italia generally carries military cargo booked by Military Sealift Command, which uses scheduled liners to move Armed Forces material and equipment whenever possible.

Purpose of the test was to determine feasibility of supplying a Sixth Fleet, on-station, combat stores ship by using one of the giant barge carriers now in commercial service. With 23 either sailing, being constructed, or on order, these ships represent a significant segment of the merchant marine of tomorrow—the vessels which will be available for military support.

Two approaches were established by the sponsor, the Atlantic Service Force. First was helolift of military cargo ship to ship while both were underway. Second phase was in-port test using helicopters and the San Diego's booms to transfer cargo from barges in the water to the stores ship.

During the test, fleet officials hoped to determine feasibility of helolifting palletized loads from open gondolas and barges aboard a LASH and identify any problems associated with lifting empty gondolas from deck to deck. A gondola is an open, 4x8x20-foot container. They also wanted to determine if a helo could lift pre-palletized cargo from a barge in the water without affecting stability of the barge or work ability of the men aboard the craft. A final objective was to check ability of the fleet ship's cargo handling gear to lift palletized loads from a barge alongside the stores ship.

About 850 measurement tons of dry provisions and fleet freight were loaded aboard three LASH barges and three gondolas at Norfolk, along with 160 tons of refrigerated foodstuff. Dry cargo to be helolifted was put on standard wooden pallets and placed in gondolas which were moved by truck from the Naval Supply Center at Norfolk to the docks. Pallets in the three gondolas were pre-slung for helo pickup. Ten groups of

four pallets each were readied for air transfer to the San Diego.

Barges were towed to LASH Italia by tugs and hoisted aboard by the ship's gantry crane which can load 466 tons every 15 minutes. Tarps were used to cover the gondolas and the barge from which cargo would be helolifted. This was necessary since heavy barge hatch covers cannot be removed while the ship is under way.

On November 29, LASH Italia departed from Savannah, Georgia, where she had loaded commercial cargo and picked up two Navy observers. Eight days later she arrived in Lisbon, Portugal. Between her arrival at Lisbon at 8 p.m. on December 7 and her departure on December 9, the ship put 19 barges fully loaded with commercial cargo into the water, picked up 18 empty barges and carried on barge-organization operations. She also took aboard 16 Navy men—damage control teams, a safety officer, a signalman, a hookup man and a combat camera crewman.

Once the ship was under way, an additional observer was delivered aboard the LASH Italia by helo—normal procedure in vertical replenishment operations at sea.

Initially, San Diego and LASH Italia planned to rendezvous at 14 knot speeds and to work up to maximum safe speeds while steaming on parallel courses. However, limited transit time between Lisbon and Rota plus later commitments of the barge ship led to a decision to begin operations at 20-knot speeds.

A rain which had been falling stopped, skies cleared, and San Diego's flight deck soon dried out as LASH Italia took a position off San Diego's port bow. At the time the wind was from 16 to 25 knots, sea swells ran from 3 to 5 feet, and skies were clear. The ships maintained their positions about 1,050 yards apart.

With damage control teams and other Navy specialists on station aboard LASH Italia, vertical replenishment operations got underway. First cargo to be lifted was that in the gondolas. Lifting four pallets at a time, San Diego's UH46 helo delivered 24 pallets in six lifts in an elapsed time of 13½ minutes—deck to deck.

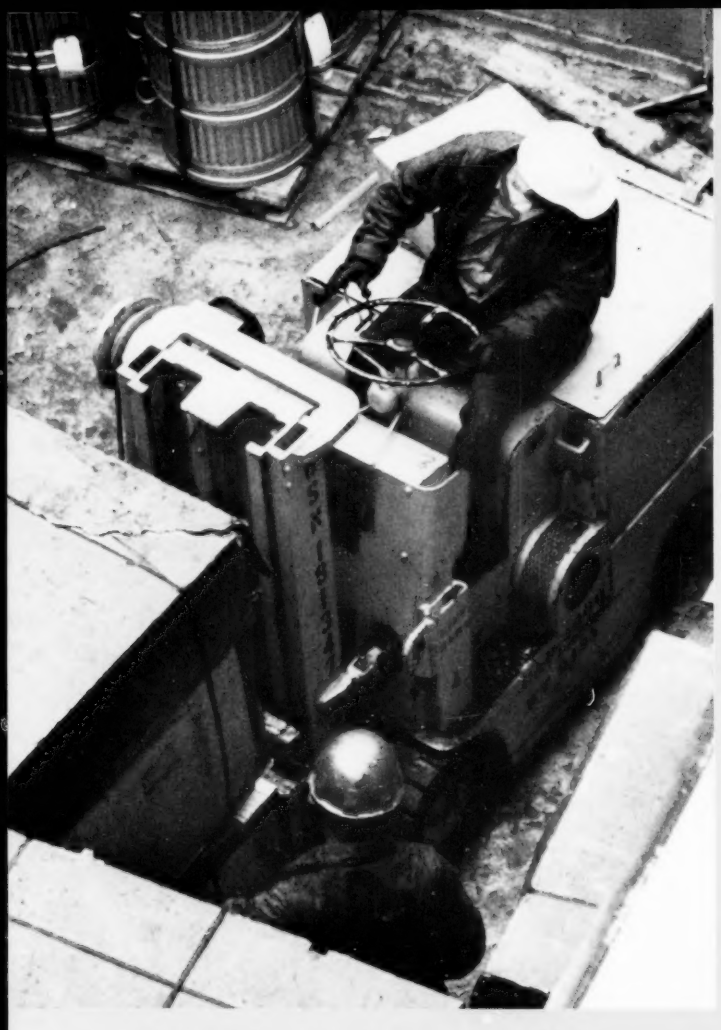
At the time, San Diego was experiencing 5 to 10 degree rolls while the bigger LASH Italia did not roll at all. Once on the San Diego's decks, cargo was moved forward as quickly as possible—with speed limited primarily by San Diego's rolling motion.

Gondolas empty, the helicopter crews began moving the remainder of the MSC-booked military cargo which was stowed in barges. Again, there were no problems and six additional helo lifts were made in an elapsed time of 16 minutes. Following that operation, the three empty gondolas were picked up from LASH Italia and moved to San Diego.

In a 37½ minute operation, 15 helo lifts were made, all without delay, incident or accident. Lifts ranged from 2,900 pounds to 4,100 pounds. And despite the speed of delivery, the San Diego crew, using fork lifts and elevators, cleared San Diego's decks of cargo even though one of two elevators was not operating.

After LASH Italia arrived in Rota December 10, in-port operations commenced even before sunrise. Barges were lowered into the water by the LASH crew with Navy LMC-6 workboats and tugs used to move them to unloading points. Two were placed alongside San Diego

ROTA BOUND: THE USS San Diego and LASH Italia steam a parallel course shortly before beginning vertical replenishment operations. LASH Italia is a Prudential-Grace Lines barge carrier providing scheduled service to Mediterranean ports.



IN A BARGE: A workman uses a forklift to move pre-palletized cargo into position for helicopter pick-up.

for transfer of additional military supplies. These were unloaded by use of the Navy ship's 10 cargo booms. Since the harbor was calm, only the center sections of barge hatch covers were lifted off. When the covers were two feet above the barges, the craft were moved alongside the ship so that the center section could be stored temporarily aboard end-section hatch covers. The first barge was ready for unloading in 40 minutes. Fork lifts lowered into the barges made the job easier once the center section of cargo was removed.

Helicopters also were used to remove empty gondolas from the decks of San Diego, and to unload some of the cargo carried aboard a barge floating in the open harbor. Downwash of the helo caused no problems in unloading, and men involved had no trouble working in the barge beneath the hovering helo. Four lifts were made from that barge—and in-port helo lifts totaled seven—all of which were accomplished without hitch.

Success of the operation does not mean that fleet ships can expect to be supplied in this manner in the near future. Lessons learned indicate a need for further study—and development of alternative procedures for Navy–commercial operations. In the limited test it was apparent that scheduling problems could be serious if the fleets depended solely on commercial ships, that preparation of cargo for lift could be both time-consuming and expensive, that use of ship's booms to unload a bobbing barge alongside also is time-consuming, and that gondolas limit the usable deck space aboard the receiving ship if they remain there once empty.

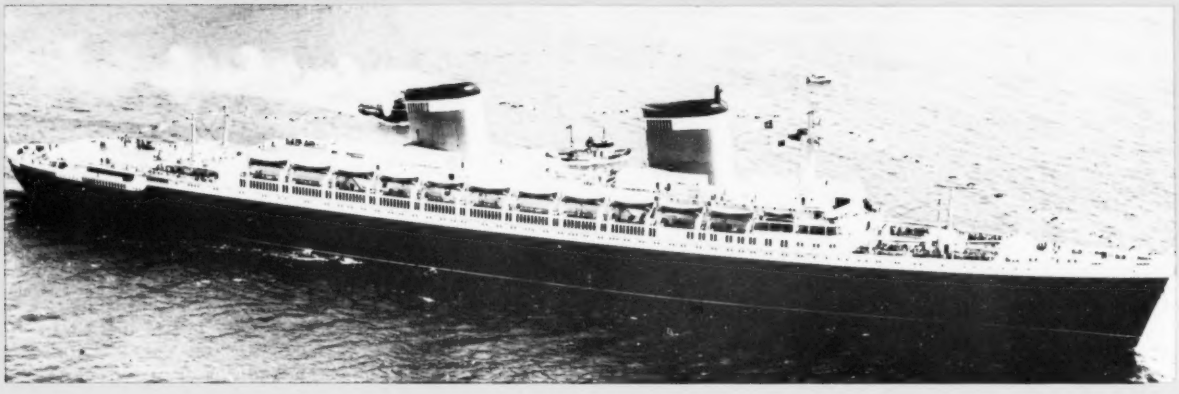
Nevertheless, a great deal was learned about both the advantages and disadvantages of using a commercial barge carrier in underway replenishment operations. Understanding both, strategic mobility planners have a more solid base of information to use in developing contingency plans which will assure most effective use of all maritime assets available in an emergency situation.

DESTINATION SAN DIEGO: A CH-46 helicopter from the USS San Diego lifts cargo from the decks of the LASH Italia for transfer to the Navy ship.

LIFT: A CH-46 Sea Knight helicopter airlifts cargo from a barge for delivery to the combat stores ship USS San Diego.

Ex-queen of the American merchant marine and holder of the trans-Atlantic speed record, the SS United States waits in

Exile



SS UNITED STATES

by
Howard L. Rosenberg

For more than 20 years, Pier 86 at North River in New York was home berth of the reigning lady of the American Merchant Marine, the SS United States. Once crowded by thousands, the pier today is silent and deserted as crisp Atlantic winds whip through its many tiers.

The former flagship of United States Lines now is in exile at the Navy's Cheatham Annex in Virginia—with her future uncertain.

The United States was purchased February 6th by the Maritime Administration which has subsidized her construction and operation since she entered trans-Atlantic service July 3, 1952. Constructed by the Newport News Shipbuilding and Dry Dock Co., she cost more than $28 million. Since her christening she has compiled quite a record.

On July 12, 1952 the United States set a trans-Atlantic speed mark on her maiden voyage. She averaged 31.69 knots, eclipsing the record of the Queen Mary by almost 4 knots.

Specifications of the United States are as impressive as her history. With a length of 990 feet, she has a breath of 101 feet, 6 inches and a depth from the top of her forward funnel to her keel of 175 feet. She has 12 decks and is propelled by steam turbines powering quadruple screws. With beds for two thousand passengers, the ship has quarters for a thousand crewmen. Air conditioned and fireproof, she has a theatre, swimming pool, lounges and ballrooms.

The Maritime Administration has solicited proposals from operators interested in the purchase or charter of the vessel for operation under the American flag. Proposals are to be submitted by March 30. Until a decision is made, the United States will lay at anchor. Though sale of the United States was not unexpected, it still was a shock to those concerned by the demise of the American flag passenger fleet. Two schools of thought concerning the sale are diametrically opposed to each other.

One group views the sale as the only possible solution from an economic standpoint, recognizing that operating costs of the ship far outweigh revenue to be earned by keeping her in service.

The other maintains that the SS United States should continue to sail, no matter what the cost, as a matter of national pride, and to show the U.S. Flag. The United States, they say, is a symbol of the nation's technology and maritime tradition.

What will happen to the United States? Unless someone is interested in operating the ship, and is financially able to do so, she may end up in the reserve fleet. She would be unlikely to return to the seas unless needed as a troop ship. ⚓

Taluga does it again . . .

USNS Taluga has been making a name for herself refueling Navy ships as she demonstrates over and over again the efficiency of MSC civilian-manned oilers. However, last January she did more than fill the fueling needs of the USS Cleveland in the Gulf of Tonkin. Taluga also provided a passenger on the Cleveland with immense satisfaction.

Capt. Elwin C. Maupin, who was at the time commander of Amphibious Ready Group Bravo in the Tonkin Gulf, was riding the bridge during the underway replenishment by Taluga. Captain Maupin was director of the tanker division of Military Sealift Command until April of last year. In that job he helped develop the fleet support program now being carried out by the MSC civilian-manned oilers.

During the operation the crew of Taluga pumped more than 100,000 gallons of fuel to the Cleveland in less than an hour while Captain Maupin watched from the bridge.

The Taluga was transferred from the Navy combatant fleet to MSC last fall and a civilian crew was specially trained in underway refueling procedures. She was then

ON THE BRIDGE: Captain Maupin watches from USS Cleveland as she is replenished by Taluga.

and again . . .

deployed to Southeast Asia to conduct refueling operations with Navy combatant vessels. (see Sealift September 1972)

Rear Admiral John D. Chase, Commander of Military Sealift Command recently inspected the Taluga and said the ship's crew "has met all commitments, completing over 160 underway replenishments." "My conversations with numerous commanding officers," he added, "indicate full acceptance of the Taluga, ranking her well up with class leaders considering rig/unrig time, pumping rate, and the crew's can-do attitude."

Following refueling of the Cleveland, Taluga headed for Vietnamese waters to support the Navy's 7th Fleet.

Captain Maupin was relieved as commander of Amphibious Ready Group Bravo when the Cleveland arrived in Subic and returned to the States.

Cleveland's commanding officer, Capt. Robert E. Kirksey also commended Taluga's performance. "Her crew did an excellent job and reacted to the situation well," he said.

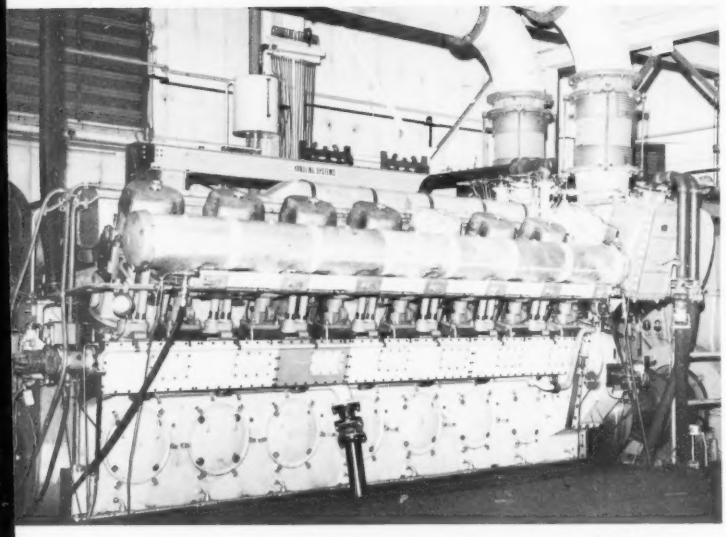
PULLING UP: A Navy destroyer steams toward the Taluga as crewmen stretch the hoses.

and again

READY, AIM, FIRE: A Taluga crewman prepares to fire a rigging line to a Navy ship during underway replenishment operations.

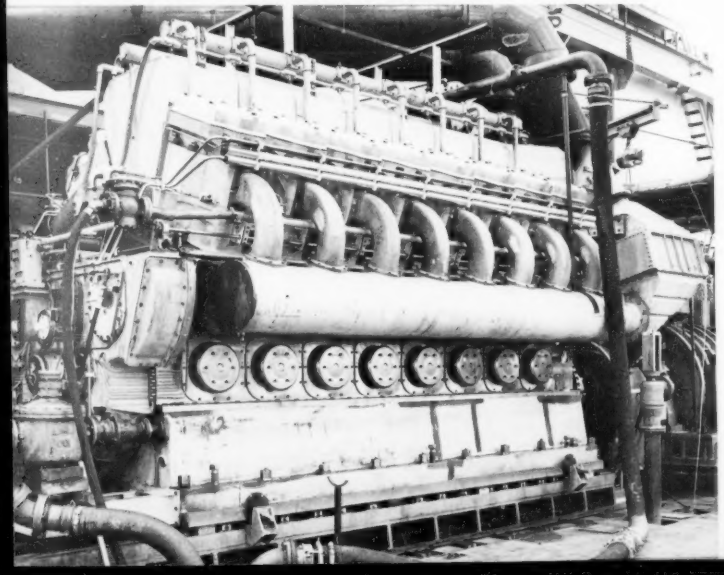
Diesel engines in new tankers will be easy to maintain, economical and have standardized controls to provide

Plenty of power & performance



COLT-PIELSTICK: Four of the 25,000 ton tankers will be powered by twin V–14, Colt-Pielstick engines, each producing 7,000 shaft horsepower. The engines are turbo-charged and non-reversing, as are the Enterprise diesels.

ENTERPRISE: This 16-cylinder, V-type, turbo-charged, medium-speed diesel engine will be installed in five of the nine tankers private investors are building for charter by MSC.



With keels already on the ways and construction progressing on three of the nine 25,000 ton tankers being built by private investors for long term MSC charter, it is expected that the first ship will be delivered to MSC by mid-1974.

All will be powered by medium speed diesel engines and all ships will have comparable engine control systems. While diesel engines are "big" in European and Asian shipping circles, most American ships this size have been powered by steam turbine engines.

Five of the nine tankers MSC needs to support the military services will be powered by 16-cyclinder, turbo-charged, V-type Enterprise engines (model DSRV-16) which develop 7,000 shaft horsepower at 400 revolutions per minute. Each ship will have two Enterprise diesels geared to a single shaft. Five ships are being built at Bath, Maine, by Bath Iron Works for a consortium of three private companies headed by Marine Transport Lines.

The other four, being constructed in the Todd Shipyards facility at San Pedro, California will be powered by 14-cyclinder, twin, Colt-Pielstick engines (model PC-2). They also are turbo-charged, V-type engines. The Colt-Pielstick diesels will develop 7,000 shaft horse-power at 520 revolutions per minute. Cruising speed of the nine tankers is to be 16 knots.

Both ships are designed for a one-man engine room watch from an engineering operating station. Engines can be controlled either from bridge consoles or the engineer's consoles. With addition of extra equipment, allowed for in the ship's designs, it would be possible to operate the tankers with no engine room watch. Control systems on all nine tankers will be standardized to make it easier for crewmen who may move from ship to ship. All power plants will drive controlled pitch propellers through clutch gear drives.

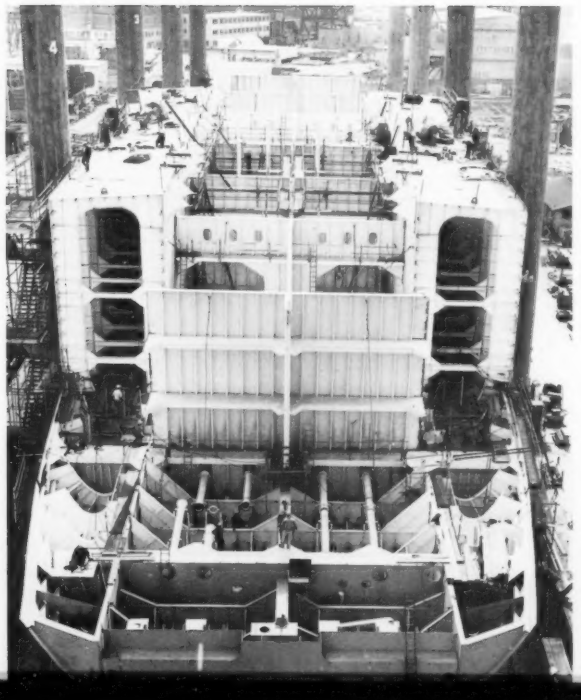
The engines are designed to burn No. 2 diesel fuel or 3,500 SSU No. 1 heavy fuel oil. Fuel consumption is expected to be in the .34 to .37 pounds per shaft horsepower range.

Under the terms of the MSC contract with the consortium building the nine 25,000 ton tankers, headed by Marine Transport Lines, all nine ships are to be turned over to MSC for operation by the end of 1974.

⚓

CHILE TAKES OVER: Commander Victor Henriquez of the Chilean Navy, (left) and Captain Wiliam E. Muncy, Assistant Chief of Staff for Plans and Operations at MSC, Far East, sign the documents as USNS LST 277 becomes a ship of the Chilean Navy. Capt. Darrel D. Ruebsamen, commander of MSC, Far East, and Chilean Ambassador to Japan Oscar Pinochet attended the ceremony.

MOVIN' ON...



ON THE WAYS: Progress is substantial as work continues on the nine tankers being built by private industry for long term charter by MSC.

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